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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,374	02/14/2006	Thierry Delvigne	Q88013	4266
23373 7590 10/05/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER SOUW, BERNARD E	
			ART UNIT 2881	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/539,374

Applicant(s)

DELVIGNE ET AL.

Examiner

Bernard E. Souw

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/16/2005 (Transmittal).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) 4,5,7,8,10,11 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/16/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), (FR 02 15906), filed 12/16/2002, which papers have been placed of record in the file.

Information Disclosure Statement

2. Receipt is acknowledged of information disclosure statement (IDS) submitted on 06/16/2005. The submission is in compliance with the provisions of 37 CFR 1.97.

A signed copy of the information disclosure statement is here enclosed.

Claim Objections

3. Claims 7, 8, 10, 11 and 14 are objected to because of the expression "as claimed in either of claims (#) and (#)". The claim language is misleading, since the term "either ... and" means "both".

It would be better to say, "as claimed in claim (#) or claim (#)".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al. (USPAT 3,471,696) in view of Lee et al. (USPAT 5,445,964), hereinafter Lee'964 and Haas (USPAT 3,988,926).

► Regarding claims 1 and 12, Moore et al. disclose a method or device for the continuous determination of oil consumption, which eventually reflects a damage to at least one system for post-treatment of the exhaust gases from an internal combustion engine (i.e., a "filter" or "trap", as defined by the disclosure on pg.1/ll.12-15), characterized in that:

- (i) a determined quantity of at least one radiotracer is used to modify (i.e., to label) the lubricating oil, the fuel and/or the additive for which the impact on a filter/trap 58 (here serving as Applicant's post-treatment system) is to be measured, as recited in col.6/ll.26-35), wherein Moore's use of bromine compound as an oil additive is recited in col.2/ll.31-36, especially lines 33-34, and as a conventional oil additive in col.3/ll.36-39;
- (ii) a measurement of the radiotracer is taken from the exhaust gases which has accumulated in the post-treatment system 58 (filter/trap), the measurement being taken using a detector 66 which is sensitive to radiation emitted by the radiotracer that has accumulated in the filter/trap 58, as recited in col.6/ll.61-67.
- (iii) the measurements taken by the detector 66 are recorded by scaler 48, as recited in col.6/ll.65-67.

Moore's further recitations may be discarded, as they are not needed, for being directed to calculate the lubrication oil consumption. Although Moore's is not

specifically aimed at determining a damage, but more directed towards oil consumption, Moore's intermediate result of determining the radioactivity of combustion gases accumulated in the post treatment system 58 can readily be used to determine the degree of the damage inflicted to any filter/trap used in the system. This follows directly from Applicant's own disclosure on pg. 2, lines 21-26 (or sect.[0009] of USPGPub 2006/0237640), which specifically recites:

"the radioactivity of the combustion gases that has accumulated in the post-treatment system, using a probe sensitive to ionizing radiation, in order to determine the quantity of residual products present and hence the degree of damage to said post-treatment system."

and further, on pg. 3, lines 32-36 (or sect.[0016] of USPGPub 2006/0237640), which specifically recites:

"Thus the measured quantity of radiotracer that has accumulated in the post-treatment system accurately reflects the degree of damage caused by the lubricating oil, the fuel and/or the additive."

However, Moore et al. do not transmit the counts recorded by the scaler 48 to a programmed computer to convert these measurements into the degree of damage caused to the post-treatment system by the lubricating oil, the fuel and/or the additive(s).

Lee'964 discloses a method or device for determination of lubricating oil consumption of an internal combustion engine by employing a trap and radioactive bromine as tracer, as recited in Col.1/ll.56-63. Lee'964's measurement result is

transmitted to a programmed computer (PC), as shown in Fig.1 and recited in Col.7/II.63-68 and Coil.8/II.1-2.

Although Lee'964 prefers laser diode spectroscopy to radioactive tracer method due to some health considerations recited in Col.1/II.63-66, Lee'964's objections of using the radioactive tracer method is effectively overcome by Moore et al. by employing low-level bromine tracer having 35 microCurie activity instead of 80 milliCurie, as expressly recited in Col.25-35.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Moore's alternative bromine method instead of Lee'964's laser diode spectroscopy, since Lee's health-related objections can be effectively removed by employing Moore's alternative technique of using low-level bromine tracer, as expressly taught by Moore et al. in Col.25-35.

One of ordinary skill in the art would have been motivated to use bromine tracer instead of Lee's diode spectroscopy technique, since the bromine tracer method is known to have important advantages, as taught by Moore et al. in Col.3/II.53-61.

However, Lee's computerized signals are taken from an infrared photon detector, not from a nuclear radiation detector. Haas discloses a computerized system that records signals from radioactive tracers, as recited in col.1/II.17-25, i.e., analyzers 38, 40, 42 shown in Fig.1 and recited in col.3/II.40-45, which are further processed by a computer, as recited in col.3/II.53-62, especially line 60, and further in col.7/II.1-26, especially line 25. Haas's system is not a non-analogous art, since it is being used with a combustion engine, as recited in col.14/II.1-10, especially line 8.

Notes:

(a) The disclosure on pg.1/ll.12-15 defines a system for post-treatment of the exhaust gases from an internal combustion engine particularly as “a system for retaining particulates and/or for removing nitrogen oxides, carbon oxides and residual hydrocarbons”, i.e., in short, a “filter” or a “trap”.

(b) The term [caused by the lubricating oil, the fuel and/or at least one lubricating oil additive and/or fuel additive used] does not carry any patentable weight, since it is fully irrelevant to the claim, as to what might have caused the damage. Relevant is here only the fact that the filter, or trap, is damaged, i.e., it no longer functions as such.

(c) The Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references (Moore et al. and Lee'964). *In re Nomiya*, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA) 1969. In this case, in combining Moore et al. with Lee'964 one does not simply take Moore's detection result directly to Lee'964's processor (PC), since Moore's result comes out from a scaler, whereas Lee'964's result comes from a diode laser absorption spectroscopy, such that the processing steps are different, but certainly well known in the art, as evidenced by

Moore's formula recited in Col.7/II.63-68 and Coil.8/II.1-2. Evidence for the compatibility of such combination is provided by Haas.

► Regarding claim 13, Moore's post-treatment system 58 is a particulate filter comprising a mesh 62 and porous material 64, as shown in Fig.4 and recited in col.6/II.41-50, especially in lines 45-50.

5. Claims 2, 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al. in view of Lee'964 and Haas, and further in view of Hevesy & Levi (1936) (Wikipedia <http://en.wikipedia.org/wiki/Neutron_activation_analysis>), Ritchie et al. (USPGPub 2004/0025853), hereinafter Ritchie'2004, and McMaster, "McMaster Nuclear Reactor" <<http://www.science.mcmaster.ca/mnr/NAA-Page/naa.htm>> (11/26/2002).

Moore et al. as modified by Lee'964 and Haas shows all the limitations of claim 2, 7 and 8, including strong indications of introducing radiotracers (claim 2) or activated species (claims 7 & 8) of identical composition to the lubricating oil additives or their substitutes (claims 7 and 10), or having no effect on the oil properties (claim 8), or both (claim 11), as implicated by Moore et al. in col.3/II.15-69, especially lines 23-30.

Moore's bromine compound is readily identified as fuel additive, as expressly recited in col.2/II.31-36, especially II.33-34, and col.2/II.68-72, especially II.69-70. However, neither Moore et al. nor Lee'964 nor Haas teach to use activable species, i.e., species that have been artificially made radioactive.

Hevesy and Levy (1936) teach that radioactive isotope form of any element can be created by neutron activation, as recited in Wikipedia, "Neutron Activation Analysis", page 1/II.2-3 from bottom, and page 2/II.13-15.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form radioactive isotopes of any element by neutron activation, since the addition of one neutron does not change the atomic number, and hence, the element and its chemical properties do not change (forming the so-called radioactive isotope, "Neutron Activation Analysis" page 1/II.2-3 from bottom), such that the tracer element can be chosen as desired.

One of ordinary skill in the art would have been motivated to form radioactive isotopes of any desired element by neutron activation, since the type of tracer element and its half-life can be carefully chosen to be appropriate for the purpose envisioned.

Specifically regarding claim 2 (from which claims 7-11 depend), Ritchie et al. teach that lubricating oil additives includes calcium and magnesium, as recited in sect.[0062] and [0132]. McMaster-Nuclear-Reactor further teaches that calcium, magnesium and strontium (specifically recited in claims 2 and 9) can be artificially made radioactive by neutron activation at pretty high yields, especially strontium, as shown in the figure drawing on pg.2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form radioactive isotopes by neutron activation, in order to produce short-lived radioactive tracers that would not impose environmental hazard.

One of ordinary skill in the art would have been motivated to form radioactive isotopes of calcium and magnesium as part(s) of additives to the lubricating oil, so they can be used for continuously measuring the degree of damage of traps and filters in internal combustion engines, as previously taught by Moore et al..

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form oil and/or fuel additives comprising radioactive isotopes of calcium and magnesium, since these species are chemically identical (claims 2, 7 and/or 10) to the non-radioactive additives (Adh) or activable species (EAhi), as taught by Moore et al. in combination with Ritchie et al. and McMaster-Nuclear-Reactor.

One of ordinary skill in the art would have been motivated to use radioactive tracers of calcium and magnesium in the form that have identical composition with the lubricating oil additives (Adh) or activable species (EAhii), so they would have no effect on the oil properties (claim 8), as implicated by Moore et al. in col.3/ll.38-39 with the term "*conventional* additive".

Note, claim 7 is effectively the same as claim 10, since none of the claims actually specify, which additive (or activable species) is original and which one is substitute (Eaci/Adc), so they can be interchanged without any consequence.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al. in view of Lee'964, Haas, and further in view of Hevesy & Levi, Ritchie et al. and McMaster.

Moore et al. as modified by Lee'964 and Haas shows all the limitations of claim 6, as previously applied to the parent claims 1 and 2, except the use of a tracer element that has been neutron-activated and/or activated by a proton beam.

Hevesy & Levy (1936) teach that radioactive isotope form of (any) element can be created by neutron activation, as recited in "Neutron Activation Analysis", Wikipedia <http://en.wikipedia.org/wiki/Neutron_activation_analysis>, page 1/II.2-3 from bottom, and page 2/II.13-15.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form radioactive isotopes of any element by neutron activation, since the addition of one neutron does not change the atomic number, and hence, the element and its chemical properties do not change (forming the so-called radioactive isotope, "Neutron Activation Analysis" page 1/II.2-3 from bottom), such that the tracer element can be chosen as desired.

One of ordinary skill in the art would have been motivated to form radioactive isotopes of any desired element by neutron activation, since the type of tracer element and its half-life can be carefully chosen to be appropriate for the purpose envisioned.

The additional prior art references Ritchie et al. and McMaster are here cited just because of the dependence of claim 6 on claim 2.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al. in view of Lee'964 and Haas, and further in view of WLINTERINGHAM (Nature 167, 1951, p.155) and Snell (Phys. Rev. A 52, 1937, pp.1007-1022).

Moore et al. as modified by Lee'964 and Haas shows all the limitations of claim 3, as previously applied to the parent claim 1, including the use of short-lived radioactive element bromine 82.

As a matter of fact, Moore's radioactive tracer comprises radioactive bromine, as recited in col.3/ll.53-61, reciting a half life of about 36 hrs. Such a bromine isotope is easily recognized as bromine 82. This official notice is supported by Wlnteringham (Nature 1951), reciting a half-life of 34 hr, and further, by Snell (Phys. Rev. A 1937), reciting that other bromine isotopes have much shorter half-lives.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use bromine 82 as radioactive tracer, since its half-life is short enough so as not to impose an environmental hazard.

One of ordinary skill in the art would have been motivated to use bromine 82 as radioactive tracer, since its half-life is conveniently long so as to allow its use for measuring the degree of filter damage in combustion engines.

8. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al. in view of Lee'964 and Haas, and further in view of Fromm (1997).

Moore et al. as modified by Lee'964 and Haas shows all the limitations of claim 14, including the use of a detector for ionizing radiation. As a matter of fact, Moore's detector 46 shown in Fig.1 is a scintillation counter, as recited in col.4/ line 51. A scintillation counter is a probe for detecting ionizing radiation, as generally known in the art. This official notice is supported by (Fromm 1997)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a probe for detecting ionizing radiation for detecting the radiation from radioactive bromine, since radiation from radioactive materials, including bromine, is an ionizing radiation.

One of ordinary skill in the art would have been motivated to use a scintillation counter, since scintillation counters are one of the oldest and technically-simplest types of radiation detectors.

► Regarding claim 15, Moore's filter 64 (pellets) is placed on the combustion gas exhaust line, between the post-treatment system 62 (mesh) and the point 34 at which these gases are released into the atmosphere, as recited in col.6/ll.45-50 and shown in Fig.4 and Fig.3. Fromm is here cited just because of the dependence of claim 15 on claim 14.

Indication of Allowable Subject Matter

9. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Indication of Allowable Subject Matter

10. The following is a statement of reasons for the indication of allowable subject matter :

► Claim 4 contains allowable subject matter for reciting that the technetium-99-m is incorporated into the oil or the fuel in the form of an aqueous solution of sodium pertechnate NaTcO₄. This indication of allowance is additionally subjected to Obviousness Double Patenting rejection (see next section).

► Claim 5 contains allowable subject matter for reciting that the germanium-69 is incorporated into the oil or the fuel in the form of at least one tetraalkylgermane. This indication of allowance is additionally subjected to Obviousness Double Patenting rejection (see next section).

Double Patenting

Non-Statutory Type Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Obviousness Type Double Patenting

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11. Claims 1, 3-6 and 12-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 14, 4, 15, 7, 12 and 13, respectively, of copending U.S. Application No. 10/526,973, which has been allowed, but patent not yet issued. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

► Claim 1 is (provisionally) rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/526,973. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claim 1 recites the same limitations as claim 1 of copending application, except the recitation of a post-treatment system for exhaust gases. However, the disclosure on pg.1/ll.12-15 defines a system for post-treatment of the exhaust gases from an internal combustion engine particularly as “a system for retaining particulates and/or for removing nitrogen oxides, carbon oxides and residual hydrocarbons”, i.e., in short, a “filter” or a “trap”. The same trap is also recited by claim 1 of the copending claim.

In the body of the claim, the addition of “*fuel and/or additive*” to the “*lubricating oil*” does not distinguish the present claim from the copending one, since it is recited as optional addition that only makes the claim broader in scope.

Thus, claim 1 is nothing else than just a slightly different version of claim 1 of the copending claim, at most with its scope slightly broadened. However, a broader claim is principally rejected by a narrower claim.

The additional limitation "*caused by the lubricating oil, the fuel and/or at least one lubricating oil additive and/or fuel additive used*" does not carry any patentable weight, since it is recited only in the preamble, and furthermore, since it is fully irrelevant to the claim as to what might have caused the damage. Relevant is here only the fact that the filter, or trap, is damaged, i.e., it no longer functions as such.

► Claim 3 is (provisionally) rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 14 of copending Application No. 10/526,973. Although the conflicting claims are not identical, they are not patentably distinct from each other because the additional limitation "*short-lived*" does not carry any patentable weight, since it is a manifestation of natural law. The addition of "*fuel and/or additive*" to the "*lubricating oil*" is recited as optional addition that only makes the present claim broader in scope. Again, a broader claim is principally rejected by a narrower claim.

► Claim 4 is (provisionally) rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 4 of copending Application No. 10/526,973. Although the conflicting claims are not identical, they are not patentably distinct from each other because the additional limitation "*or fuel*" is recited as optional addition that only makes the present claim broader in scope. Again, a broader claim is principally rejected by a narrower claim.

► Claim 5 is (provisionally) rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 15 of copending Application No. 10/526,973. Although the conflicting claims are not identical, they are not patentably

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distinct from each other because the additional limitation "*or fuel*" is recited as optional addition that only makes the present claim broader in scope. Again, a broader claim is principally rejected by a narrower claim.

► Claim 6 is (provisionally) rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 7 of copending Application No. 10/526,973. Although the conflicting claims are not identical, they are not patentably distinct from each other because the additional dependency on claim 2 makes the present claim only broader in scope. A broader claim is principally rejected by a narrower claim.

► Claim 12 is (provisionally) rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 8 of copending Application No. 10/526,973. Although the conflicting claims are not identical, they are not patentably distinct from each other because the additional limitations makes the present claim only broader in scope, in precisely the same way as claim 1 becomes broader than claim 1 of the copending application. As before, a broader claim is principally rejected by a narrower claim.

► Claim 13 is (provisionally) rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 11 of copending Application No. 10/526,973. Although the conflicting claims are not identical, they are not patentably distinct from each other because the additional limitations make the present claim only broader in scope. The copending claim 11 recites a "particle filter", which is already

encompassed in the Markush group of claim 13, which recites a "particulate filter". Again, a broader claim is principally rejected by a narrower claim.

► Claim 14 is (provisionally) rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 12 of copending Application No. 10/526,973. The conflicting claims are identical; they do not constitute a Statutory Double Patenting only because their parent claims are different.

► Claim 15 is (provisionally) rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 13 of copending Application No. 10/526,973. The conflicting claims are identical; they do not constitute a Statutory Double Patenting only because their parent claims are different.

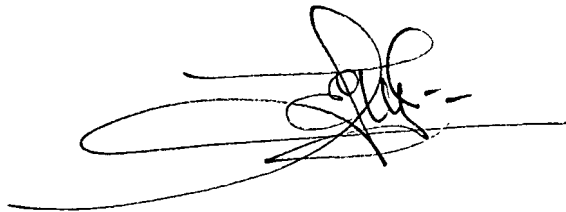
Communications

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw, Ph.D., whose telephone number is 571 272 2482. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on 571 272 2293. The central fax phone number for the organization where this application or proceeding is assigned is 571 273 8300 for regular communications as well as for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571 272 5993.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Bernard E. Souw', with a long horizontal line extending to the right.

Bernard E. Souw, Ph.D.
Patent Examiner – AU 2881
September 25, 2007